

ULTRASONIC TREATMENT METHOD

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Inventor: USUI TORU
Applicant: SONITSUKU FUEROO KK
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Abstract of JP4197433

PURPOSE: To intensify and uniformize the cavitation in a treatment solution and to sufficiently perform ultrasonic treatment, in performing predetermined treatment by irradiating an object to be treated with ultrasonic waves to propagate the ultrasonic waves through the object to be treated, by irradiating the treatment solution with ultrasonic waves through deoxygenated water.

CONSTITUTION: City water 3 is supplied to a washing tank 2 to be allowed to overflow to an overflow tank 4 and the object 5 to be washed from the previous process is fed and dipped in the water 3 by a basket 6, whereas a deoxygenated water tank 8 is preliminarily filled with deoxygenated water 9 in a hermetically sealed state to be irradiated with ultrasonic waves of predetermined frequency from an ultrasonic vibrator 10. The water hermetically sealed in the deoxygenated water tank 8 is deoxygenated water and dissolved oxygen is not released at the time of the expansion of air bubbles under negative pressure and the impact in a compression process is not weakened and cavitation is intensified and cavitation intensity is enhanced over the whole to become uniform and constant and this strong ultrasonic energy is sufficiently propagated through a partition plate 7 having good transmissivity and the object 5 to be washed received in the basket 6 receives sufficient ultrasonic washing action.

